

Remarks

Applicants have carefully reviewed the office action and address all the rejections in this response. Applicants respectfully traverse the rejections of the independent claims based on pending US Pat. App. No. 20020034218 to Aris Papasakellariou et al. ("Aris").

Reservation of right to antedate publication

In view that the present application was originally filed in the European Patent Office on January 14, 2000, and Aris appears to claim the benefit of a provisional patent application filed in the US on or about January 5, 2000, Applicants reserve the right to file an antedating affidavit at a later date during prosecution of this case, should such an affidavit is deemed necessary.

Examiner's Claim Interpretation

Applicants respectfully reserve their right to object to the claim interpretation that the Examiner provided in the Office Action. For example, the Examiner interpreted the distributing step having a detection stream and a synchronising stream as "either being two functions performed, in each finger." That appears oversimplification of the invention.

Additionally, the characterization that the "decorrelating" step is "early-late detection using either one or two correlation circuits" appears incorrect. See Specification at page 10, lines 13 to page 11, line 5. See also, Fig. 7, which is described on page 16, lines 15-19.

Likewise, Applicants reserve their right to object to the claim interpretation in which the reducing step was interpreted as meaning "using the phase and amplitude information for a finger to reduce" the interference of at least one other finger. But see page 14, line 30 to page 16, line 13, portion of which states, "S-curve of the transmission system is stored in the interference computation module 132 being part of the interference reduction device 131. The interference computation module 132 receives the path delays for the assigned signal paths and for all paths $j \neq i$ respectively... Further, module 132 receives the complex path weights ..."

Rejection of claims 1-6, 9-14 and 16-25 based under 35 U.S.C. § 102(e) as being anticipated by Aris

Examiner rejected claims 1-6, 9-14 and 16-25 as being anticipated by Aris under 35 U.S.C. § 102(e). Applicants address the rejections with respect to independent claims 1 and 16. Because the independent claims are believed to be patentable, the dependent claims, which depend on the independent claims, would also be patentable.

With respect to claim 1, nothing in Aris discloses or suggests the steps of:

(d) distributing the digitised signal (110, 111) to a detection stream and a synchronizing stream,

(e) decorrelating (121, 122) the digitised signal by a code sequence (112) in the synchronisation stream and

(f) reducing the interference of at least one other ($j \neq i$) than the signal component of the assigned signal path (i) with the signal component the assigned signal path (i) in at least one of the receiver fingers.

In particular, nothing in Aris discloses or suggests distributing the digitised signal to a detection stream and a synchronisation stream. Aris does not disclose or suggest a "synchronizing stream" or a "code sequence" used to decorrelate in the synchronizing stream. Likewise, nothing in Aris discloses or suggests the reducing step as claimed in claim 1. Aris discloses an S-curve, but it does not disclose, "S-curve of the transmission system is stored in the interference computation module 132 being part of the interference reduction device 131. The interference computation module 132 receives the path delays for the assigned signal paths and for all paths $j \neq i$ respectively * * *. Further, module 132 receives the complex path weights * * *." See page 14, line 30 to page 16, line 13. Accordingly, it is respectfully submitted that claim 1 as presented is patentable over Aris.

With respect to claim 16, Aris does not disclose or suggest the elements:

a timing error detector (102) for estimating an of a delay ($\tau_k^{(i)}$) of the signal component of the assigned signal path (i) and

an interference reduction device (131) adapted to reduce the interference of least one other signal component (j) with $j \neq i$ and $j \in \{1, \dots, N\}$ with the said signal component of the assigned signal path (i).

Because Aris does not disclose or suggest these elements, it is respectfully submitted that Aris cannot anticipate or render obvious independent claim 16. Accordingly, claim 16 is patentable over Aris.

As presented earlier, in view that the independent claims 1 and 16 are believed to be patentable, the dependent claims 2-15 and 17-25, which depend on these independent claims are also believed to be patentable. Applicants request the Examiner to reconsider.

Conclusion

In view of the foregoing amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejections and issue an early notice of allowance. No fee is due with this response.

Respectfully submitted,



Naren Chaganti (Reg. No. 44,602)
432 S. Curson Ave, Ste. 12 H
Los Angeles, CA 90036
naren@chaganti.com E-mail
(650) 248-7011 phone

Attorney for Applicants

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Naren Chaganti (Reg. No. 44,602)